

Figure 3. Circuit for Measuring PLC Control Signal Power in Standby Mode

 $[74 \ FR \ 12075, \ Mar. \ 23, \ 2009, \ as \ amended \ at \ 75 \ FR \ 10966, \ Mar. \ 9, \ 2010]$ 

## § 431.325 Units to be tested.

For each basic model of metal halide lamp ballast selected for testing, a sample of sufficient size, no less than four, shall be selected at random and tested to ensure that:

- (a) Any represented value of estimated energy efficiency calculated as the measured output power to the lamp divided by the measured input power to the ballast  $(P_{out}/P_{in})$ , of a basic model is no less than the higher of:
  - (1) The mean of the sample, or
- (2) The upper 99-percent confidence limit of the true mean divided by 1.01. (b) Any represented value of the energy efficiency of a basic model is no greater than the lower of:
  - (1) The mean of the sample, or
- $\left(2\right)$  The lower 99-percent confidence limit of the true mean divided by 0.99.

 $[75~{\rm FR}~10968,\,{\rm Mar.}~9,\,2010]$ 

ENERGY CONSERVATION STANDARDS

## $\$\,431.326$ Energy conservation standards and their effective dates.

- (a) Except as provided in paragraph (b) of this section, each metal halide lamp fixture manufactured on or after January 1, 2009, and designed to be operated with lamps rated greater than or equal to 150 watts but less than or equal to 500 watts shall contain—
- (1) A pulse-start metal halide ballast with a minimum ballast efficiency of 88 percent;
- (2) A magnetic probe-start ballast with a minimum ballast efficiency of 94 percent; or

- (3) A nonpulse-start electronic ballast with either a minimum ballast efficiency of 92 percent for wattages greater than 250 watts; or a minimum ballast efficiency of 90 percent for wattages less than or equal to 250 watts.
- (b) The standards described in paragraph (a) of this section do not apply to—
- (1) Metal halide lamp fixtures with regulated lag ballasts;
- (2) Metal halide lamp fixtures that use electronic ballasts that operate at 480 volts; or
  - (3) Metal halide lamp fixtures that;
  - (i) Are rated only for 150 watt lamps;
- (ii) Are rated for use in wet locations; as specified by the National Fire Protection Association in NFPA 70 (incorporated by reference; see §431.323); and
- (iii) Contain a ballast that is rated to operate at ambient air temperatures above 50 °C, as specified in UL 1029, (incorporated by reference; see § 431.323).

## § 431.327 Submission of data.

- (a) Certification. (1) Except as provided in paragraph (a)(2) of this section, each manufacturer or private labeler, before distributing in commerce any basic model of equipment covered by this subpart and subject to an energy conservation standard set forth in this part, shall certify by means of a compliance statement and a certification report that each basic model meets the applicable energy conservation standard.
- (2) Each manufacturer or private labeler of a basic model of metal halide lamp ballast shall file a compliance